The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte KATSUNORI TAKAHASHI
and MASAHIDE TOMITA

_____

Appeal No. 1999-0440
Application 08/813,706

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ON BRIEF

_____

Before JERRY SMITH, BARRETT and DIXON, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claim 4, which constitutes the only claim remaining in the application. Amendments after final rejection were filed on February 13, 1998 and September 8, 1998. Both amendments were entered by the examiner.

The disclosed invention pertains to a game computer

system dealing with both sound and image data. More particularly, the invention has a sound data output unit including sound memories which only store sound data. This sound data output unit is said to make instruction execution by the CPU more efficient.

Sole pending claim 4 is reproduced as follows:

4. A computer system for processing image and sound data, comprising:

a programmable sound generator (PSG) for generating PSG sound data;

a volume control circuit for controlling pulse code modulation (PCM) data transmitted from an external sound source;

an adaptive difference PCM (ADPCM) decoder for generating ADPCM sound data by compressing said PCM sound data;

a sound data output unit having one or more sound memories for storing only sound data generated by said PSG and two channels of said ADPCM decoder, each of said two channels using a 32kHz sampling frequency generated in accordance with a horizontal synchronizing signal;

one or more main memories for storing image and program data without said sound data;

a CPU of the 32 bits type connected with said main memories, for processing said image and program data;

one or more image memories for storing said image data; and

an output control unit, connected with said sound and image memories, for controlling transmission of the ADPCM data and an SCSI interface.

The examiner relies on the following references:

Odaka	5,172,380	Dec. 15, 1992
Glick et al. (Glick)	5,283,819	Feb. 01, 1994 (filed Apr. 25, 1991)
Ota	5,408,331	Apr. 18, 1995 (filed Dec. 13, 1991)

Claim 4 stands rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner offers Ota in view of Glick and further in view of Odaka.

Rather than repeat the arguments of appellants or the examiner, we make reference to the brief and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the brief along with the examiner's

rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claim 4. Accordingly, we reverse.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.),

cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered [see 37 CFR
§ 1.192(a)].

The examiner has indicated how he finds claim 4 to be obvious in view of the collective teachings of Ota, Glick and Odaka [Paper No. 14, pages 2-5]. Part of this finding is the examiner's statement that Ota teaches a sound data output unit having a memory to store sound data. Appellants argue that the voice signal processing section of Ota does not have any memories for storing only sound data as recited in claim 4. Appellants also argue that the video memories of Glick do not establish that it would have been obvious to the artisan to provide sound memories in a sound data output unit for storing only sound data as claimed. Finally, appellants argue that the examiner's statement that the concept of having dedicated memory to handle specific data is old and well known in the art of microprocessor circuit design does not factually establish the requisite prospective motivation to support a prima facie case of obviousness [brief, pages 8-10].

The examiner admits that Ota does not teach separate audio only memories, but the examiner contends that Glick teaches the concept of providing separate, special (dedicated) memories for specific types of data, that is, VRAM for storing video data. The examiner finds that it would have been

obvious to provide separate sound data memories in Ota for the advantages of separate memories taught by Glick [answer, pages 4-5].

We will not sustain the examiner's rejection of claim 4. Ota teaches that video data and audio data can be processed separately. For example, the video data in Ota is stored in memories 21a and 21b whereas the sound data is decoded and outputted directly to terminal 57. There are no sound memories in Ota for storing only sound data. Glick adds nothing to Ota because Ota already teaches that dedicated memories can be provided for just the video data [RAMs 21a and 21b]. Thus, the examiner's reliance on Glick teaching the use of dedicated memories adds nothing to Ota. The video memories of Ota or Glick do not provide any motivation for providing the claimed one or more sound memories for storing only sound data in Ota because Ota does not rely on sound memories at all. Ota is a simple CD player for reproducing sound and video information from a CD. There is no need for the Ota system to use memories for storing sound data. The examiner has failed to provide any rational basis why the artisan would have been motivated to place one or more sound memories in Ota

when no memories are required. The only reason apparent to us for modifying Ota in the manner proposed by the examiner is to reconstruct appellants' invention in hindsight. Such hindsight reconstruction is improper.

In summary, we have not sustained the examiner's rejection of claim 4. Therefore, the decision of the examiner rejecting claim 4 is reversed.

REVERSED

JERRY SMITH Administrative Patent Judge	)	
LEE E. BARRETT Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JOSEPH L. DIXON Administrative Patent Judge	)	

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McDERMOTT WILL & EMERY
600 13TH STREET, NW
WASHINGTON, DC 20005-3096

JS:caw